

Appl. No. 10/509,562; Docket No. NL02 0263US  
Amtdt. dated July 12, 2006  
Response to Office Action dated April 14, 2006

### REMARKS/ARGUMENTS

Claims 1-8 are pending in the application.

Claims 1-8 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-8 are rejected under 35 U.S.C. §102(e) as being anticipated by *Khan et al*, U.S. Patent Application Publication No. 2002/0120915.

Claims 1, 3, and 6-8 are rejected under 35 U.S.C. §102(e) as being anticipated by *Arora et al*, U.S. Patent No. 6,829,232.

Applicants respectfully traverse the above rejections.

#### The §112 Rejection

With respect to Claim 1, Applicants assert that the meaning of "partially connected" is defined in the Specification. "The functional units and the distributed register file are coupled by a communication network, which allows passing data produced by the functional units to the distributed register file. Usually, this communication network is *partially connected* [emphasis added], i.e. not every functional unit is coupled to every register file segment, because the use of a fully connected communication network is too expensive in terms of code size and power consumption, and also results in a decrease of the clock frequency (Specification, page 1, lines 26-29, page 2, lines 1-7)." Further, "communication via the *partially connected* communication network is preferred. The combination of a partially connected communication network and a communication means allows to derive a VLIW processor architecture having a lower communication overhead, operating at a higher clock frequency and having a better scalability when compared to a VLIW processor architecture with a fully connected communication network (Specification, page 2, lines 20-25)."

Since the feature cited in the Office Action has sufficient support in the Specification, Applicants request that the rejection of Claim 1 be withdrawn.

With respect to Claim 5, Applicants assert that the feature "register" has sufficient support in the Specification and to one skilled in the art.

The claim, as presented, is supported by the Specification and what is known in the art. See in *re Buchner*, 929 F.2d 660, 661, 18USPQ2d 1331, 1332 (Fed. Cir. 1991). All that is necessary is that one skilled in the art be able to practice the claim invention,

Appl. No. 10/509,562; Docket No. NL02 0263US  
Amdt. dated July 12, 2006  
Response to Office Action dated April 14, 2006

given the level of knowledge and skill in the art. Furthermore, as noted by the Court *In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), "a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought." Likewise, "breadth of a claim is not to be equated with indefiniteness." *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971).

In light of the foregoing discussion, Applicants request that the rejection of Claim 5 be withdrawn.

#### The 1<sup>st</sup> §102 Rejection

With respect to Claim 1, Applicants in reviewing *Khan*, note that in FIG. 2 the register files 200, 250 contain full 16-bit registers ( $A_0-A_{31}$  and  $B_0-B_{31}$ ). In contrast, Applicants claimed features include *distributed register file segments*, see FIG. 1. Thus, the invention provides that "the functional units can be coupled to one register file segment, as in case of the functional unit 7, or to multiple register file segments, as in the case of the functional unit 5, or multiple functional units may be coupled to one register file segment. . . (Specification, page 6, lines 10-15)" Also, the communication device 29 allows transferring values from the functional units 1, 3, 5, and 7 to distributed register file segments 9, 11, 13, and 15 (Specification page 4, lines 32-33)"

Thus, *Khan* does not include Applicants' claimed features; it does not anticipate Claim 1. Therefore, claim 1 is allowable over *Khan*.

With respect to dependent Claims 2-3, in that Claim 1 is not anticipated by *Khan*, these claims are also allowable.

With respect to dependent Claims 4-5, Applicants respectfully note the feature of pipelining is not mentioned in *Khan*. Consequently, Claims 4-5 are also allowable.

With respect to dependent Claims 6-8, in that Claim 1 is not anticipated by *Khan*, these claims are also allowable.

#### The 2<sup>nd</sup> §102 Rejection

With respect to claim 1, Applicants respectfully traverse the rejection based on *Arora*. In *Arora*, "the invention employs *multiple copies of a register file* [emphasis added] in a processor having a number of execution units that access the register file.

Appl. No. 10/509,562; Docket No. NL02 0263US  
Amdt. dated July 12, 2006  
Response to Office Action dated April 14, 2006

Each group of execution units can read from and write to its own copy of the file registers by a set of local read and write ports. (col. 1, lines 65-66 through col. 2, lines 1-2)."

In contrast Applicants invention includes *a distributed register file*. The distributed register file is broken up into register file segments (Specification, FIG. 1) of varying size whereas *Arora* uses register file copies of the same size (see FIG. 5).

Thus, *Arora* does not include Applicants' claimed features; it does not anticipate Claim 1. Therefore, claim 1 is allowable over *Arora*.

With respect to dependent Claims 3 and 6-8, in that Claim 1 is not anticipated by *Arora*, these claims are also allowable.

### Conclusion

Therefore based upon the foregoing arguments, *Arora* and *Khan* do not anticipate Applicants' invention.

Per MPEP §2131:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently describe in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628,631,2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim.

Applicants request the rejections under *Khan* and *Arora* be withdrawn.

Applicants believe they have addressed all of the Examiner's concerns. A Notice of Allowance is hereby solicited.

Please charge any fees other than the issue fee and credit any overpayments to Deposit Account 14-1270.

Respectfully submitted,

Date: 12-JUL-2006

By Peter Zawilski  
Peter Zawilski  
Registration No. 43,305  
(408) 474-9063

Correspondence Address:

Intellectual Property & Standards  
Philips Electronics North America Corporation  
1109 McKay Drive; Mail Stop SJ41  
San Jose, CA 95131 USA  
CUSTOMER NUMBER: 24738